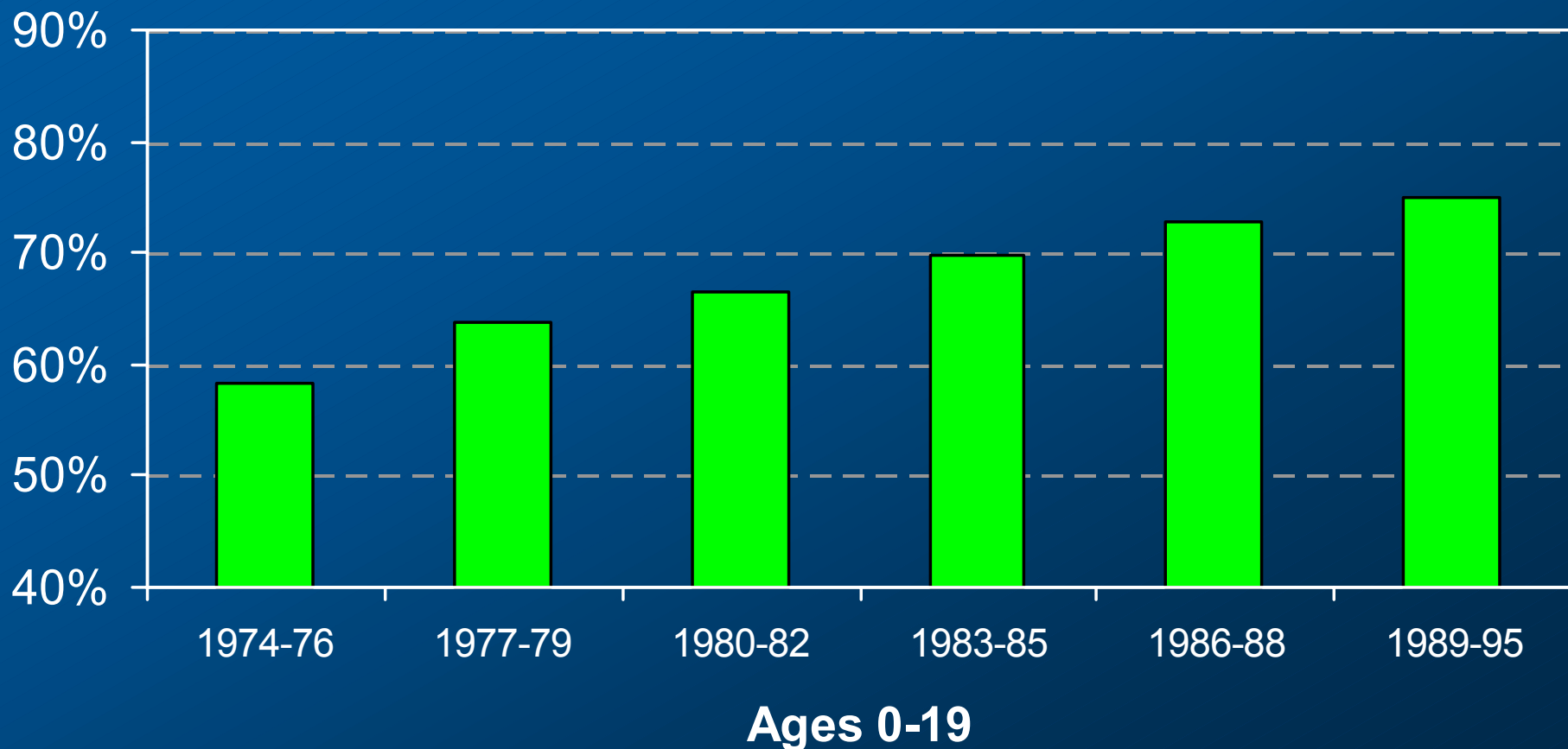


Prevention among Cancer Survivors– the example of smoking cessation

Karen M. Emmons, Ph.D.

Elyse Park, Elaine Puleo, Anne Mertens,
Rita Butterfield, Ellen Gritz, Fred Li, Jane Weeks

5-Year Relative Survival Rates, Childhood Cancer

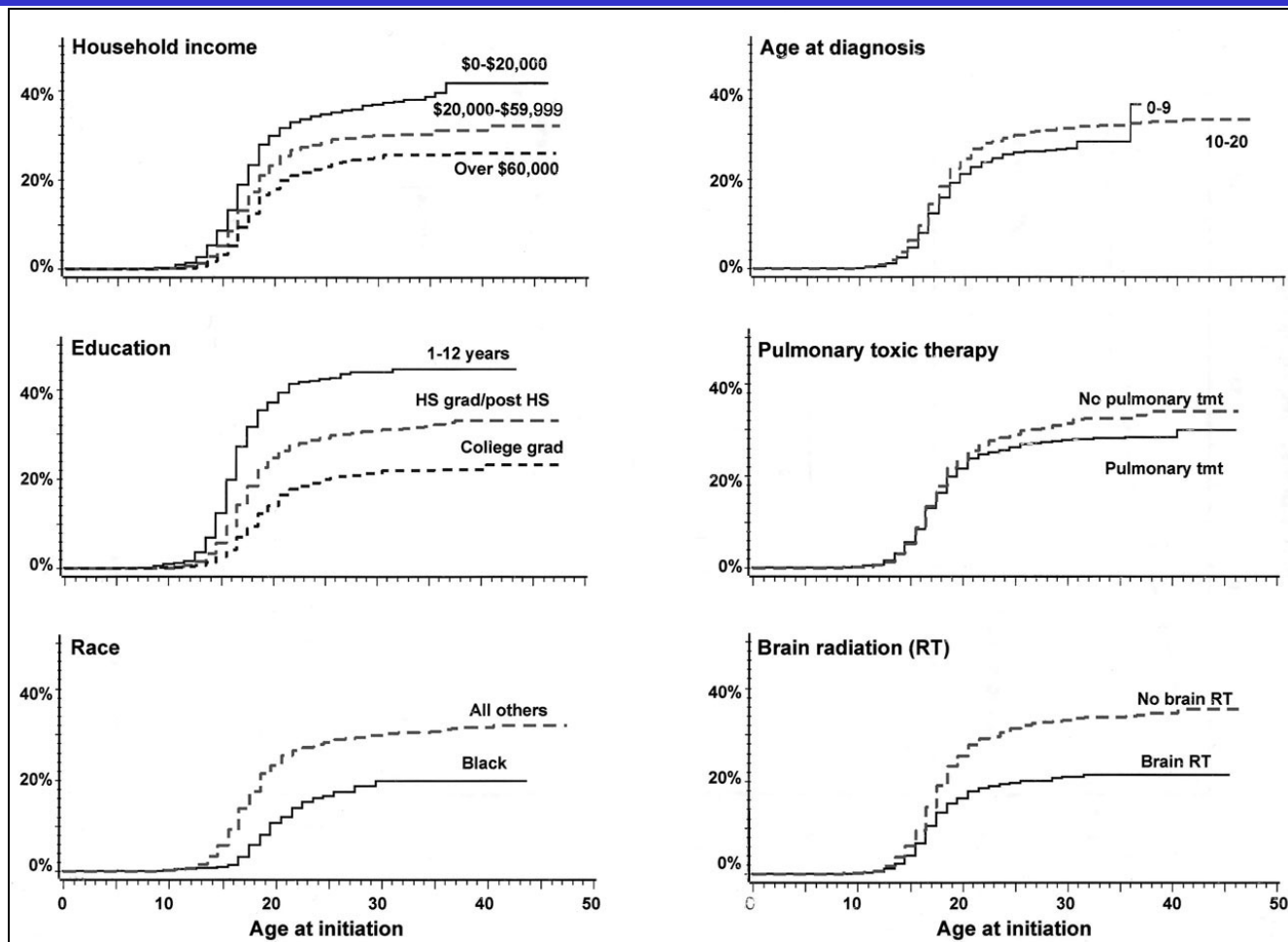


Smoking Status of CCSS Cohort Members, age 18 and older (n=9,709)

Ever Smoker	28%
Current Smoker	17%
Other Tobacco Use	11%
Smoking Rate (cigs/day)	14
Quit Attempt in previous 2 years	42%

Emmons, et al., *JCO*, 2002

Actuarial Estimates of Age at Initiation of Smoking for Selected Characteristics



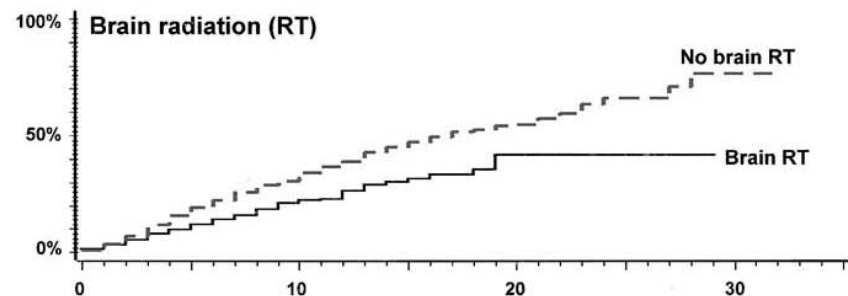
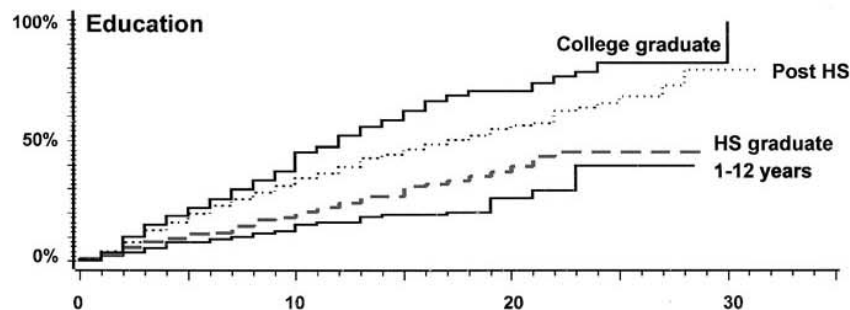
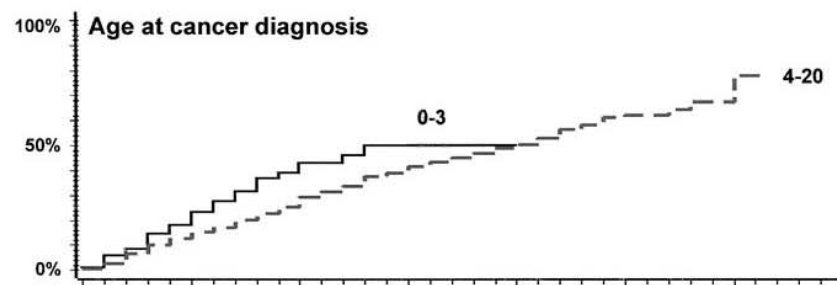
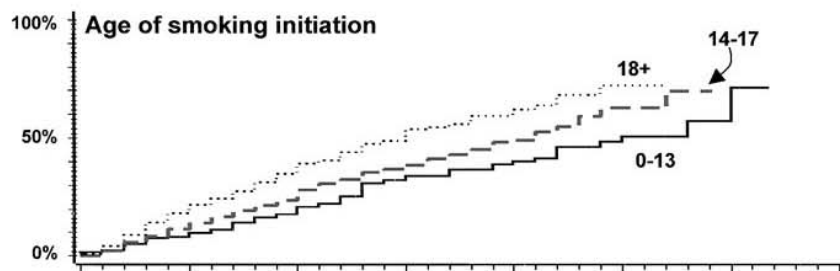
Survivor's Knowledge re Smoking

- High levels of:
 - knowledge about harmful effects
 - perceived vulnerability
 - Low intentions to use tobacco
- Tyc, Hadley, & Crockett, 2001

Smoking Prevention Among Childhood Cancer Survivors

- Intervention:
 - Late effects risk counseling
 - Educational video
 - Written physician feedback
 - Telephone counseling @ 1- and 3 months
- Outcomes (12-months):
 - Higher smoking-related knowledge
 - Higher perceived vulnerability
 - Lower intention to smoke
- Tyc, et al., 2003

Actuarial Estimates of the Years to Smoking Cessation for Selected Characteristics



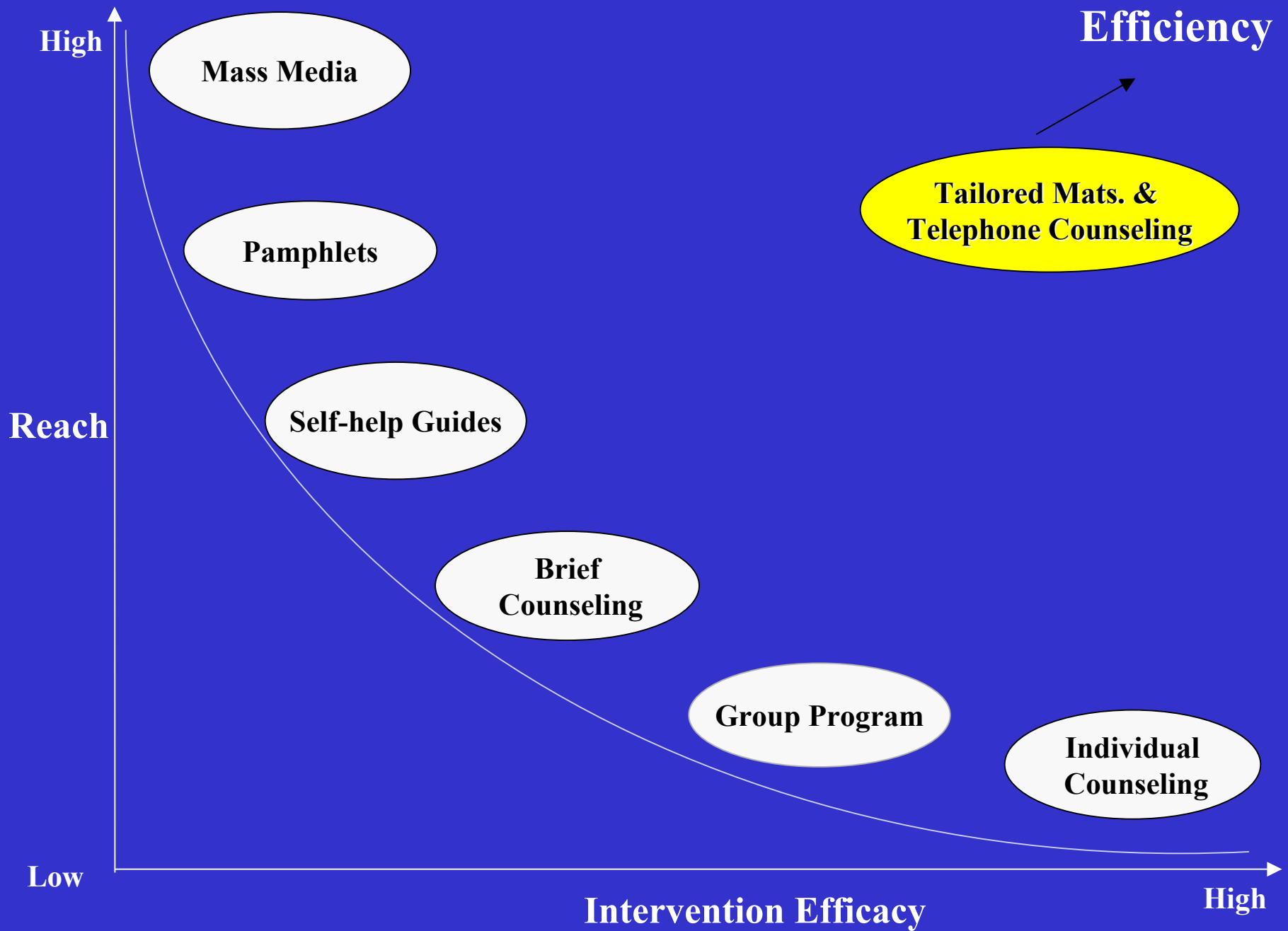
Emmons, et al., *JCO*, 2002



Challenges to Intervention Research with Survivors

- Population is geographically dispersed
- Age group is highly mobile
- Stressors of low income
- Survivor identity is key
- Cancer 'experience' is dependent on cancer/treatment type





Partnership For Health (PFH) Study Design

Baseline Survey

Randomization (n=796)

Self-help Control Group

(n=398)

- Physician Message
- Self-help materials

Intervention Group (n=398)

- Physician Message
- Tailored and targeted materials
- Peer delivered phone counseling
- Stage-matched smoking cessation
- NRT

PFH Demographics

Variable	M or %	Variable	M or %
Age	31	Cancer Diagnosis	
Gender (% Male)	53%	Leukemia/Lymphoma	55%
Education		CNS/Neuro	18%
< HS	13%	Bone/Soft Tissues	27%
HS	33%	/Wilms Tumor	
Post-HS	54%	Treatment Types	
Employed	80%	Surgery	10%
Marital		Radiation +/- Surg	18%
Single	41%	Chemo +/- Surg	22%
Married/Partnered	44%	Radiation + Chemo	50%
Other	15%	Age at Diagnosis	
		0-9	48%
		10-14	28%
		15+	24%

Smoking Characteristics --PFH

- Smoking rate 15 cigs/day (SD=12)
- Quit attempt, 58%
past year
- Nicotine dependent 53%
- Confidence to quit, 2.21
next month (M, 5-pt scale)
- Readiness to Change
 - Precontemplation 18%
 - Contemplation 43%
 - Preparation 39%



Social Contextual Factors --PFH

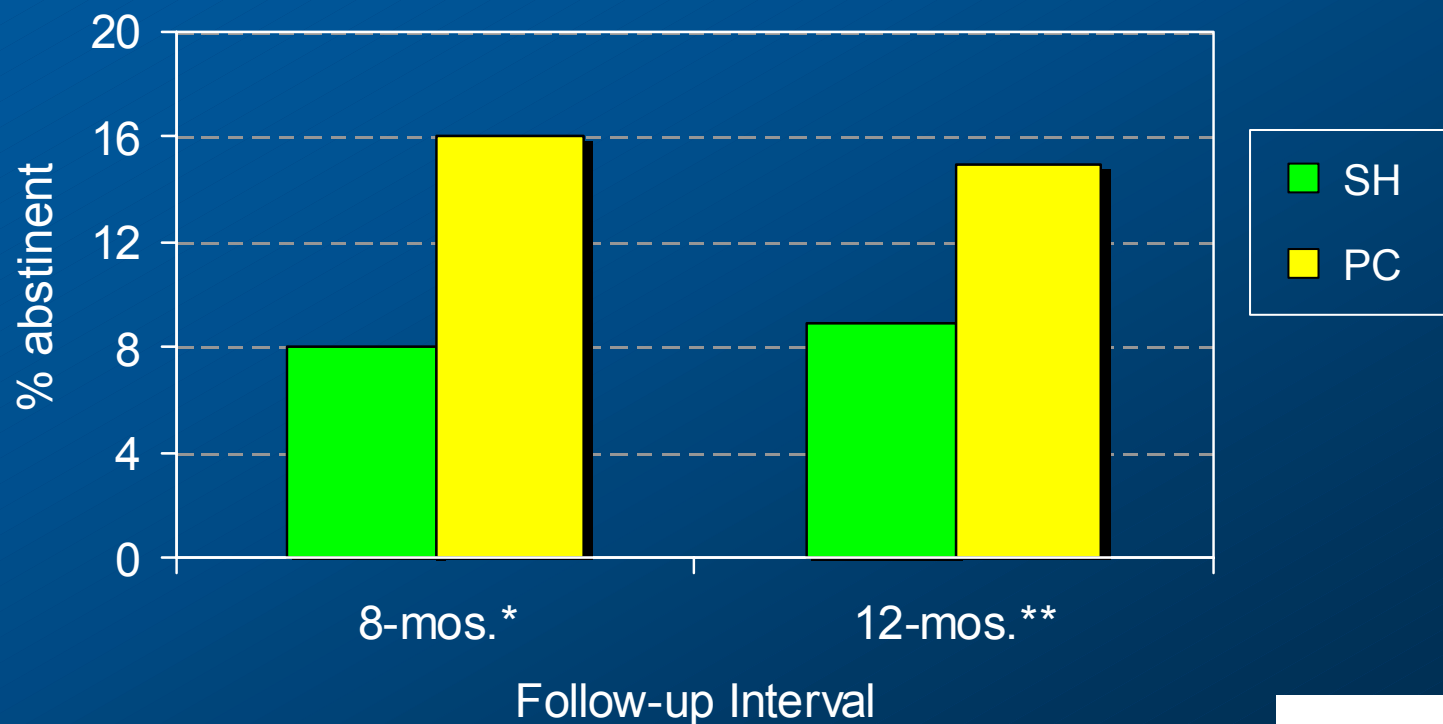
- Social network
 - Nonsmoking 5%
 - Most/all smokers 54%
- Social support (M, 5-pt scale) 3.92 (sd=.88)
- Moderate or high perceived risk 89%
- Depression/psych symptoms 14%
- Have a PCP 77%



PFH—Health Care

- Have a primary care physician 77%
- Provider knows cancer status 96%
- Provider very/extremely knowledgeable about the illness 48%

Partnership for Health Smoking Cessation Outcomes



* $p < .001$

** $p < .01$



Cost-Effectiveness

- **Intervention delivery cost per person:
\$298.17 for the PC group, and \$1.25 for SH.**
- **Incremental cost-effectiveness:
\$5,371 per additional quit at 12 months**

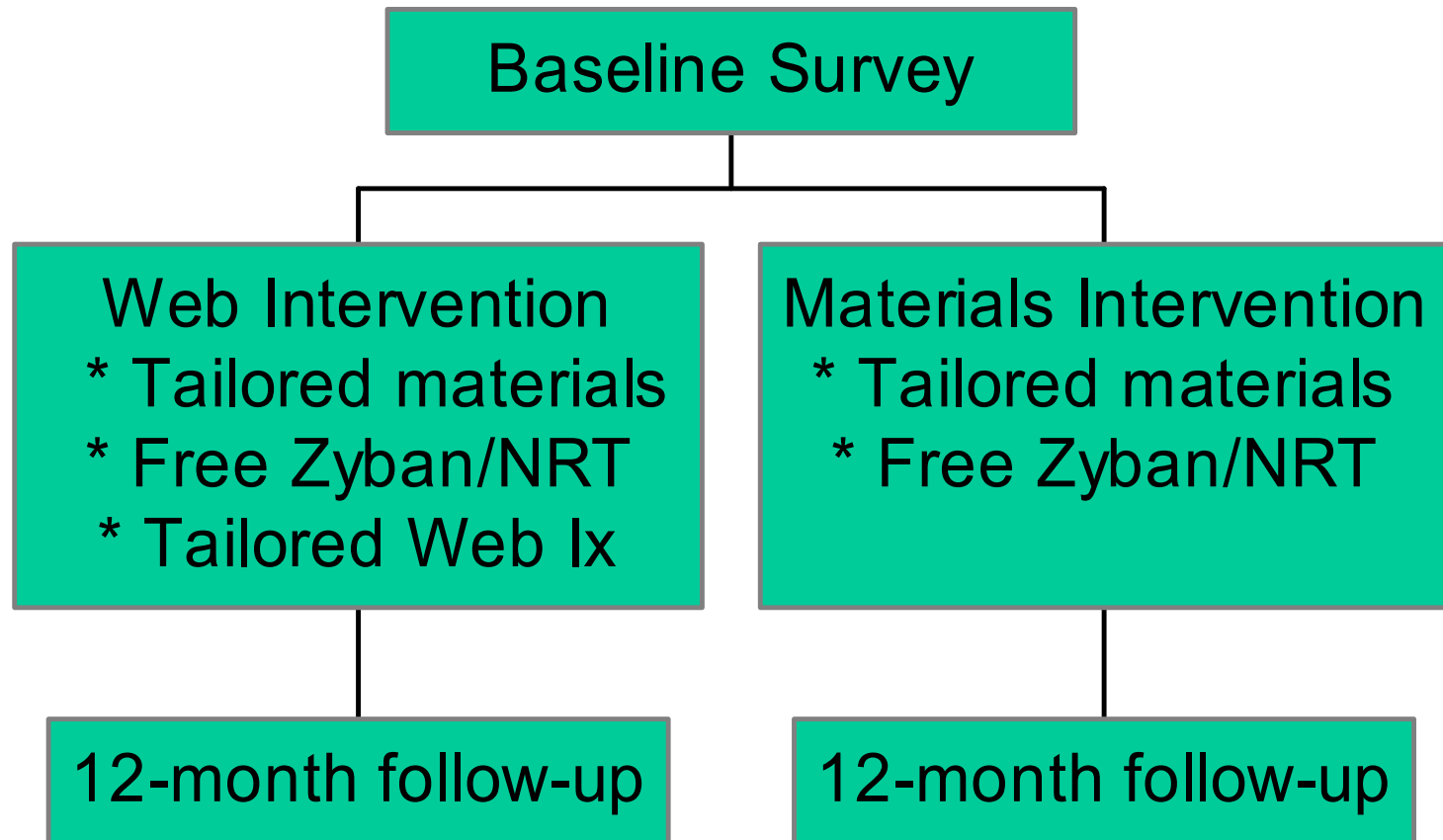
How to Provide Smoking Services to Survivors

- Increase oncologists' understanding of the importance of providing smoking cessation services
- Increase organizational infrastructure for smoking cessation within survivorship programs
- Develop mechanisms for offering pharmacotherapy to all smokers
- Develop and evaluate smoking cessation interventions that can reach childhood cancer survivors

Teachable Moments for Smoking Cessation

- Transition from inpatient to outpatient care
 - Involvement of family members
 - Clinical feedback
 - Incorporation of prevention into 'milestone' events
-
- McBride & Ostroff, 2003

PFH-2– A Web-Based Intervention



5-Year Relative Survival Rates, Childhood Cancer

